

alkoxide and silicon alkoxide, with acetylacetone, hexamethylenetetramine and at least one acid, and then heating said mixture and exposing it to radiation.

2. (Amended) The crosslinked resin as claimed in claim 1, wherein the metal alkoxide is a titanium alkoxide.

3. (Amended) The crosslinked resin as claimed in claim 2, wherein the metal alkoxide is a zirconium alkoxide.

4. (Amended) The crosslinked resin as claimed in claim 1, further comprising a complex lead/zirconium and titanium alkoxide.

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Cont. 5. (Amended) The crosslinked resin as claimed in claim 4, wherein the complex lead, zirconium and titanium alkoxide is obtained from lead carboxylate, zirconium alkoxide and titanium alkoxide.

6. (Twice Amended) The crosslinked resin as claimed in claim 1, wherein the acid is acetic acid.

7. (Twice Amended) The crosslinked resin as claimed in claim 1, wherein the acid is propanoic acid.

8. (Twice Amended) The crosslinked resin as claimed in claim 1, wherein the acid is trifluoroacetic acid.

9. (Twice Amended) The crosslinked resin as claimed in claim 1, further comprising at least one photoinitiating agent.

10. (Amended) A process for the manufacture of a ceramic or of a glass, comprising:
preparing a solution comprising at least one member selected from the group consisting of a simple metal alkoxide, complex metal alkoxide, and silicon oxide in acetylacetone;
reacting under hot conditions an acid and hexamethylenetetramine with said solution to produce a resin;
depositing the resin on a substrate;
exposing the resin to ultraviolet radiation;
calcining the radiation-exposed resin, in order to obtain the ceramic or the glass.

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11. (Amended) The process of the manufacture of a ceramic or a glass as claimed in claim 10, wherein the solution comprises a heavy alcohol containing a 2-ethylhexanol group.

12. (Twice Amended) The process for the manufacture of ceramic or of glass as claimed in claim 10, wherein the simple metal alkoxide is at least one member selected from the group consisting of zirconium alkoxide and titanium alkoxide.

13. (Twice Amended) The process for the manufacture of ceramic or of glass as claimed

in claim 10, further comprising preparing the complex metal alkoxide from lead carboxylate, zirconium alkoxide and titanium alkoxide.

14. (Twice Amended) The process for the manufacture of ceramic or glass patterns at the surface of a substrate as claimed in claim 10, wherein exposing the resin is carried out through a mask so as to define at least one radiation-exposed pattern and at least one non-radiation-exposed pattern; and further comprising dissolving the non-radiation-exposed patterns in a solvent.

15. (Amended) The process for the manufacture of a ceramic or of a glass as claimed in claim 14, wherein the solvent comprises at least one member selected from the group consisting of acetic acid and 2-ethylhexanol.

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16. (Twice Amended) The process for the manufacture of a ceramic or of a glass as claimed in claim 10, wherein the substrate is glass.

17. (Twice Amended) The process for the manufacture of a ceramic or of a glass as claimed in claim 10, wherein the substrate is silicon.

18. (Twice Amended) A capacitor, comprising the ceramic or the glass manufactured by the process according to claim 10.

19. (Twice Amended) A piezoelectric transducer, comprising the ceramic or the glass manufactured by the process according to claim 10.

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Cont . 20. (Twice Amended) A ferroelectric memory, comprising the ceramic or the glass according to claim 10. |

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Please add the following claims.

21. (New) A ceramic made by the process according to Claim 10.

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22. (New) A glass made by the process according to Claim 10. |

SUPPORT FOR THE AMENDMENT

Claims 1-20 are amended for clarity and to place them in proper form. Thus, support is found in the original claims. Newly added Claims 21-22 are supported at original Claim 10. No new matter is believed to be introduced by the above amendment or the newly added claims.

REMARKS

Claims 21-22 are added. Claims 1-22 are active in the present application. Favorable consideration is respectfully requested.

At the outset, Applicants thank Examiner Sagar for the providing helpful comments during the courteous discussion of the present application held on December 4, 2002. Further, Applicants thank Examiner Sagar for indicating that the above amendments would further